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NOTES ON THE SUBGENERA OF *METOPIUS* WITH A SYNOPSIS OF THE SPECIES OF CENTRAL AND SOUTHERN CHINA

(Hymenoptera, Ichneumonidæ)

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With the exception of a few relatively common forms, specimens of *Metopius* are rather rarely collected. Nevertheless, many species exist, distinguished by numerous and relatively constant characters, as demonstrated by Clémont (1929) in his revision of the Palearctic species. The European species of the genus whose habits are known are parasites of Lepidoptera.

I—SUBGENERA

The genus *Metopius* was described by Panzer (1806), who included two species, *M. vespoides* (Scopoli) [= *necator* (Fabricius)] and *dissectorius* (Panzer). Viereck (1912) designated *vespoides* (Scopoli) as the genotype. Clémont (1929) apparently believed that Panzer had included three species, *dissectorius* (Panzer), *micratorius* (Fabricius) and *necatorius* (Fabricius) [= *necator* (Fabricius)]. Although placing *necator* as a synonym of *vespoides* without comment on page 349, Clémont stated in his introduction that he regarded this synonymy as not fully established, and therefore redesignated the genotype as *Ichneumon micratorius* Fabricius, a species *not* included in the genus by Panzer at the time of his original description. Even though the identity of Panzer's *vespoides* with that of Scopoli is not definitely established (Clémont suggested that the former may be the same as *M. brevispina* Thomson), Clémont's genotype fixation is out of order, and the genotype of *Metopius* must remain *Sphex vespoides* Scopoli, as originally designated by Viereck.

Clémont, following his own genotype fixation, uses the subgeneric name *Metopius* for a group of species including *micratorius* (Fabricius), and describes a new subgenus, *Peltopius*, for *vespoides* (Scopoli) and its relatives. It is evident from the foregoing that *Peltopius* must fall as a synonym of *Metopius* s. str.,

being isogenotypic with it, and that a new name must be erected for the *Metopius* s. str. of Clémont. For this group, the name *Clémontia* is here proposed. The following is a bibliographical summary of the subgenera of *Metopius*.

1. *Metopius* Panzer, 1806, Krit. Rev. d. Ins. Deutschl., 2:78.
 Type species: *Sphex vespoides* Scopoli, designated by Viereck, 1912, Proc. Ent. Soc. Wash., 14:176.
Peltastes Illiger, 1807, in: Rossi, Fauna Etrusca, 2nd Ed., p. 55.
 Type species: *Ichneumon necatorius* Fabricius [= *Sphex vespoides* Scopoli], designated by Curtis, 1824, Brit. Ent., 1:4.
Peltopius Clémont, 1927, in: Schmiedeknecht, Opusc. Ichneum., fasc. 44:3461.
 Type species: *Sphex vespoides* Scopoli, designated by Clémont, 1929, Konowia, 8:347.
2. *Peltocarus* Thomson, 1887, Deutsche ent. Zeitschr., 1887:196.
 Type species: *Metopius croceicornis* Thomson, designated by Viereck, 1914, U. S. Nat. Mus., Bull. 83:112.
3. *Ceratopius* Clémont, 1927, in: Schmiedeknecht, Opusc. Ichneum., fasc. 44:3461.
 Type species: *Ichneumon dissectorius* Panzer, designated by Clémont, 1929, Konowia, 8:408.
4. *Clémontia* Michener, new subgenus.
Metopius Clémont, 1927, in: Schmiedeknecht, Opusc. Ichneum., fasc., 44:3461.
Metopius Clémont, 1929, Konowia, 8:365.
 Type species: *Ichneumon micratorius* Fabricius.

All of the American species which I have studied [*M. bellus* Cresson, *nevadensis* Cresson, *montanus* Cresson, *pollinctorius* (Say), and an apparently new species] belong to the subgenus *Clémontia*.

II—SPECIES OF CENTRAL AND SOUTHERN CHINA

Several authors have already described species of *Metopius* from various parts of the Orient, primarily from Japan, but with the exception of the widely distributed *M. rufus* Cameron, these forms are not represented in the Chinese material before me.

All of the species treated in the subsequent part of this paper belong to the subgenus *Ceratopius* Clémont, which is, at least in so far as the species known to me are concerned, divisible into two distinct groups, as shown in the first dichotomy of the following key. The possible propriety of a fifth subgeneric name is thus indicated.

KEY TO THE CENTRAL AND SOUTHERN CHINESE SPECIES OF METOPIUS

1. Dorsal carinae of first abdominal tergite strongly elevated, so that the tergite, viewed from the side, has the upper surface strongly angulate at the summit of the subvertical anterior face; basal area of propodeum closed behind; posterior lateral angles of propodeum formed by an elevated angle on a carina; outer hind tibial spur about as long as apical width of hind tibia; first tergite with distinct longitudinal supraspiracular carina on each side.....2
- Dorsal carinae of first abdominal tergite not strongly elevated, so that the tergite, viewed from the side, has the upper surface rounded and the anterior face subhorizontal; basal area of propodeum open behind; posterior lateral angles of propodeum low and rounded; outer hind tibial spur longer than apical width of hind tibia; first tergite without supraspiracular carinae.....5
2. Fourth abdominal tergite longer than broad; abdomen strongly blue, its pale markings much reduced.....*metallicus*
- Fourth abdominal tergite broader than long; abdomen feebly metallic.....3
3. Areolet of fore wings small, with a long petiole; posterior lateral angles of abdominal tergites three to five yellow....*gressitti*
- Areolet of fore wings not or hardly petiolate; tergites one to four with complete or nearly complete pale apical fasciae.....4
4. Lateral ocellus separated from eye by nearly the ocellar diameter; propodeal areola broadest near middle, posterior end rather narrowly rounded.....*quadrifasciatus*
- Lateral ocellus separated from eye by about one-half the ocellar diameter; propodeal areola broadest near posterior end, which is broadly rounded.....*vandykei*
5. Fifth and sixth abdominal tergites shorter than apical widths, each with a distinct posterior yellow band.....*rufus browni*
- Fifth and sixth abdominal tergites about as long as apical widths, almost entirely black.....*uchidai*

Metopius (*Ceratopius*) *quadrifasciatus* Michener, new species

This is a species with feebly metallic abdomen, and complete yellow fasciae on the first four abdominal terga.

Female: Length 11 mm. *Head* black; facial shield margined with yellow, more broadly so laterally than at the ends; sides of face yellow to a point well above antennal sockets; cheeks receding immediately behind the eyes; facial shield longer than broad, widest at upper end, upper margin feebly convex except laterally, lower margin separated from anterior margin of clypeus by distance equal to about two-thirds of basal width of mandible; facial shield coarsely punctate, especially medially, punctures separated by considerably less than their diameters; clypeus below shield

more finely but closely punctate; frons rather coarsely punctate, sparsely so near ocelli; lateral ocelli separated from eye margins by nearly ocellar diameter; antennæ dark brown above, paler brown beneath, under side of scape yellow, fourth segment about as long as broad; upper margin of swollen segment of maxillary palpi yellow. *Thorax* black, a small mesepisternal angle beneath tegula, anterior lateral ridges of scutellum, posterior margins of posterior lateral teeth of scutellum, and large transverse median spot on metanotum yellow; lower lateral regions of pronotum shining and impunctate, with about three longitudinal carinæ, uppermost longest, impunctate area continued above it; mesoscutum irregularly punctured, notalices elongate, very weakly impressed; mesepisterna coarsely and closely punctured, punctures separated by much less than their diameters, dorsal process of mesepisterna thin and inconspicuously differentiated from disc, sternauli deeper posteriorly than anteriorly, rather finely and sparsely punctate anteriorly; scutellum coarsely and irregularly punctured, slightly depressed along longitudinal median line, with sides diverging slightly posteriorly, depressed anterior portion with five longitudinal carinæ, posterior lateral angles rather elongate and acute; fore wings with costal margin dusky, the dusky band narrow and inconspicuous basad to the stigma, but broad enough distad to it to include the entire marginal cell, areolet narrowed to a point toward costal margin, but not petiolate, the distocostal side being conspicuously longer than any other side; stigma black; metapleura shining, rather coarsely and sparsely punctate, punctures separated by about their diameters; fore and middle legs dark brown, infuscated, apices of femora and outer sides of fore tibiæ pale yellow; hind legs black, tibiæ and apices of femora dark brown, apices of femora each with a small yellow spot on outer side; hind tibial spurs hardly longer than width of tibia at apex; first four hind tarsal segments about as long as tibia; propodeum with costulæ distinct, areola with a longitudinal, median, impunctate line, posterior end of areola rather narrowly rounded, closed, areola broadest medially, where it gives off a carina on each side which divides to form a small, distinct, triangular area on each side, immediately above the strongly angular posterior lateral angle of the propodeum; carinæ bounding petiolar area on the sides weak. *Abdomen* black with feeble bluish or purplish metallic reflection, posterior margins of first four tergites yellow, the band on fourth tergite broadest, occupying nearly one-third of the tergite; posterior margin of fifth tergite narrowly and irregularly yellowish; abdomen coarsely punctate, second tergite more sparsely so than third and with sublateral, basal, impunctate areas; punctures of third and following tergites close, finer on posterior tergites; tergites three to six each with a weak and inconspicuous longitudinal median ridge; first abdominal tergite, seen from directly above, slightly broader than long, seen from side, strongly angulate above, the dorsal carinæ being strongly elevated to form

the angle, at which point they approach one another rather closely, behind which point they diverge slightly before converging toward the posterior margin of the segment; longitudinal supraspiracular carinae distinct and complete; tubercle below anterior end of spiracle slender; second to fourth tergites slightly broader than long (third hardly so), their posterior lateral angles not or hardly produced posteriorly; fifth tergite broader than long (proportions of length to breadth of abdominal segments as follows: II, 15/19; III, 18/20; IV, 20/22; V, 18/21); pubescence of fifth and sixth tergites fuscous.

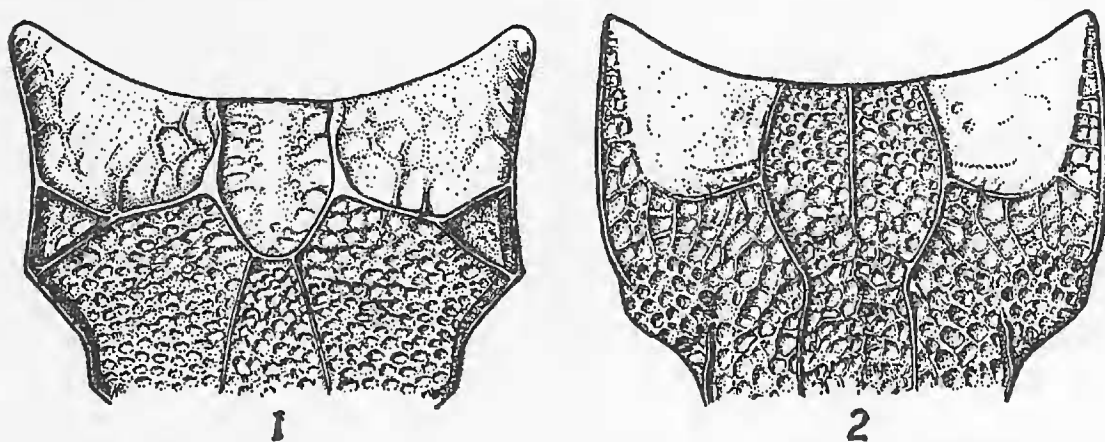


Figure 1. Dorsal and posterior surfaces of propodeum of *Metopius quadrifasciatus* Michener. Figure 2. Dorsal and posterior surfaces of propodeum of *Metopius uchidai* Michener. In these figures, no attempt has been made to show the lateral surfaces of the propodeum, which are visible to a certain extent from a posterior dorsal point of view.

Holotype, female: Tsin Leong San, east Kwantung, China, June 5, 1936 (J. L. Gressitt), on loan deposit in the California Academy of Sciences.

This species differs from *M. dissectorius* (Panzer) by the more elongate clypeal shield, which is more widely separated from the anterior margin of the clypeus, and the more elongate abdominal tergites. It differs from *M. fuscipennis* Wesmael by having only an inconspicuous keel on the abdominal tergites two to four, by the presence of a yellow band on the first tergite, and the absence of distinct bands on the fifth and sixth tergites. From *M. baibarensis* Uchida it differs in the shape of the first abdominal tergite, which is slightly broader than long, by the absence of a broad yellow band on the fifth tergite, and by the very feeble metallic reflection on the abdomen. This species differs from *M. purpureotinctus* (Cameron) and *areolatus* (Cameron) by the presence of strong, yellow, apical fasciae on the first four, but not on the following abdominal tergites, as well as by other characteristics.

Metopius (*Ceratopius*) *vandykei* Michener, new species

This species is black, with feebly metallic abdomen and conspicuous fasciæ on the first four abdominal tergites.

Male: Length nearly 12 mm. *Head* black, facial shield completely margined with yellow, most broadly so laterally, sides of face yellow to point well above antennal sockets; sides of labrum and bases of mandibles with small yellow dots; palpi testaceous; cheeks receding immediately behind eyes; facial shield distinctly longer than broad, widest just above middle, upper margin feebly convex, lower margin separated from apex of clypeus by less than one-half basal width of mandible; facial shield coarsely punctate, especially medially, punctures separated by much less than their diameters; clypeus and frons more finely punctate, punctures of latter sparse near ocelli; lateral ocelli separated from eye margin by less than one-half their diameters; antennæ dark brown above, lighter beneath, scape and pedicel yellow beneath, fourth segment slightly broader than long. *Thorax* black, upper angles of mesepisterna, lateral basal ridges of scutellum, apical teeth of scutellum, transverse median area of metanotum, and posterior lateral angles of propodeum (feebly) yellow; lower lateral region of pronotum shining and impunctate, with a single complete longitudinal carina above which the impunctate area extends a short distance; mesoscutum coarsely and irregularly punctured, notalices complete, weakly impressed, closely punctate; mesepisterna coarsely and closely punctate, punctures separated by much less than their diameters, sternauli deeper posteriorly than anteriorly, dorsal mesepisternal process thin and scarcely separable from disc; mesoscutellum more coarsely punctate than scutum, depressed along longitudinal median line, lateral margins subparallel, although feebly convex, basal depression with three or four somewhat irregular longitudinal carinæ, posterior lateral angles robust, not strongly produced; wings nearly clear, feebly brownish along costal margin from stigma to apex of wings, areolet hardly petiolate, distocostal side hardly longer than basicaudal side, stigma black; metapleura coarsely punctate, punctures separated by less than their diameters; fore tibiæ and tarsi and apices of femora yellowish testaceous, outer sides of fore tibiæ yellow, remainder of fore legs dark brownish black; middle and hind legs black, tibiæ and tarsi dark brown, apices of femora with yellow spots, bases of middle tibiæ yellow; hind tibial spurs about as long as apical breadth of hind tibiæ, first four hind tarsal segments slightly shorter than hind tibiæ; propodeum with costulæ distinct, areola with longitudinal median, irregular, impunctate line, posterior end of areola broadly rounded, closed; areola broadest well behind middle, at which point it gives off a strong carina on each side, these carinæ dividing to enclose a small pit on each side just above the posterior lateral angles of the propodeum, which are elevated

and angular. *Abdomen* black, third and following segments feebly purplish, tergites one to four with apical pale yellow bands, those of first three narrowly broken medially, that of fourth broadest, and less than one-fourth as broad as length of segment, fifth tergite with narrow apical yellow band, wanting in median third; abdomen coarsely punctate, punctures of second tergite sparser than those of third, sublateral basal area of second nearly impunctate; punctures of third and following tergites quite close, feebly separated on sixth and seventh, and finer on these posterior tergites; tergites three to six with rather distinct, longitudinal, median ridge; fourth tergite broadest part of abdomen; first tergite distinctly broader than long, seen from above, seen from side angulate on dorsal surface, dorsal carinae being strongly elevated to form the angle, and subparallel for a short distance behind angle; longitudinal supraspiracular carinae distinct; posterior lateral angles of second and third tergites slightly produced posteriorly; second and third tergites slightly broader than long, fourth tergite more distinctly broader than long, and fifth conspicuously so (proportions of length to breadth of abdominal tergites: II, 16/19; III, 17/20; IV, 18/22; V, 15/21); pubescence of abdomen partly fuscous posteriorly.

Holotype, male, No. 5060, Calif. Acad. Sci., Ent.: Likiochai Forest Station, Honan, China, September 25, 1923, collected by Dr. E. C. Van Dyke, after whom it gives me great pleasure to name this species.

This species differs from *M. dissectorius* (Panzer) by the clearer wings, the more extensive abdominal maculations, and the shape of the propodeal areola, which is unusually broad and rounded posteriorly. It differs from *M. iyoensis* Uchida and *M. takabayashii* Uchida by the unwrinkled scutellum, from *M. arakawai* Uchida by the black basal part of the first tergite and other features of the abdominal markings, and by the sublateral, basal, nearly impunctate areas of the second tergite. *M. vandykei* may be distinguished from *M. hakiensis* Matsumura and *M. sapporensis* Uchida by the yellow scutellar teeth and the almost entirely black hind femora, from the former also by the absence of a yellow mesepisternal area, and from the latter by the longitudinal, median, impunctate band on the areola.

Metopius (Ceratopius) *metallicus* Michener, new species

This large and elongate species is characterized by the strongly metallic blue abdomen and the much reduced pale maculations.

Male: Length nearly 15 mm. *Head* black, facial shield broadly margined with yellow, sides of face narrowly yellow to a point well above antennal bases; labrum with yellowish dots laterally; mandibles each with a small, sub-basal yellow spot; palpi yellowish; cheeks receding immediately behind eyes; facial shield about one and one-half times as long as broad, widest in upper one-half which is parallel sided, upper margin feebly convex, lower margin separated from apex of clypeus by a little over one-third basal width of mandible; facial shield coarsely punctate, especially medially, punctures separated by much less than their widths, closest laterally; clypeus more finely punctate than labrum or facial shield; frons slightly more finely punctate than facial shield, impunctate adjacent to ocelli; lateral ocelli separated from eye margin by about one-third ocellar diameter; antennæ blackish above, dark brown beneath, under side of scape yellow, fourth antennal segment broader than long. *Thorax* black, tegulæ a little brownish; lower lateral parts of pronotum shining and impunctate with three longitudinal carinæ, the uppermost longest, impunctate area continued above it anteriorly; mesoscutum rather coarsely and irregularly punctured, notalices feebly indicated by slightly depressed and more coarsely and closely punctate lines; mesepisterna coarsely and closely punctate, punctures separated by considerably less than their diameters, finer in sternauli than elsewhere, sternauli narrower and deeper posteriorly than anteriorly; dorsal process of mesepisterna thin and inconspicuously differentiated from disc; mesoscutellum distinctly more finely punctate than mesoscutum, feebly depressed along midline posteriorly, sides parallel posteriorly, slightly diverging toward the rear in the region immediately behind the basal depression, lateral apical angles robust, weakly produced, basal depression with four longitudinal carinæ; wings brownish, particularly dark along costal margin from basal vein to apex, including the entire marginal cell, areolet not petiolate, but with a very short side on the marginal cell, distocostal side longer than any other, stigma black; metapleura irregularly rather finely punctate, shining, punctures not close; fore legs dark brown, tarsi, anterior sides of tibiæ, and apices of femora pale yellow; middle legs black, tibiæ and tarsi dark brown, apices of femora pale yellow; hind legs black, with minute transverse yellowish line at apices of femora; hind tibial spurs but little longer than apical width of tibiæ; first four hind tarsal segments slightly shorter than hind tibiæ; propodeum with costulæ distinct, areola without distinct longitudinal median line, posterior end rather narrowly rounded, closed; areola broadest behind the middle, but nearly parallel sided in front of this broadest point, giving off, behind the middle on each side, a carina which divides to enclose a triangular space just above the strongly angular posterior lateral protuberances of the propodeum. *Abdomen* strongly metallic purplish blue beyond the first tergite, which is black; tergites two to four with posterior lateral

angles yellow, and with inconspicuous, narrow, brown, apical bands between these yellow areas; abdomen coarsely punctate, more finely so posteriorly, punctures close on first tergite, fairly close on others; tergites two to seven with a longitudinal median dorsal carina; first tergite about as broad as long seen from directly above, seen from side angulate on upper side as a result of elevation of dorsal carinæ to form angles, carinæ converging rather strongly and evenly from these angles to the posterior margin of the tergite, longitudinal supraspiracular carinæ distinct and complete; second and third tergites feebly produced posteriorly at the sides, second about as long as broad, third and fourth slightly longer than broad, fifth broader than long, sixth and seventh distinctly broader than long (Proportions of length to breadth of abdominal tergites: II, 19/20; III, 22/21; IV, 22/21; V, 19/23. These segments appear to the eye considerably more elongate than these measurements indicate.); pubescence of tergites four to seven partly fuscous.

Holotype, male: Yin Na San, east Kwantung, south China, June 15, 1936 (J. L. Gressitt), on loan deposit in the California Academy of Sciences.

This form differs from other species of the subgenus by the elongated abdominal segments. It differs further from *M. dissectorius* (Panzer) by the much longer facial shield, and from *M. maruyamensis* Uchida by the reduced maculations of the abdominal segments.

Metopius (Ceratopius) gressitti Michener, new species

This is a dark species, with the posterior lateral angles of the first five abdominal tergites yellow.

Male: Length about 11 mm. *Head* black, facial shield yellow with a large, longitudinally elongate, median brownish black area; sides of face, to point well above antennal sockets, yellow; labrum and lower part of clypeus brownish; mandibles with yellow area sub-basally; palpi yellowish; cheeks receding immediately behind eyes; facial shield longer than broad, widest a little above middle, upper margin feebly convex, lower margin separated from anterior margin of clypeus by distance equal to about two-thirds of basal mandibular width; facial shield rather coarsely punctate medially, punctures separated by less than their diameters; lower clypeus and frons a little more finely punctate than facial shield, frons sparsely punctate in region of ocelli; lateral ocelli separated from eye margins by a little less than ocellar diameter; antennæ dark above, lighter below, under side of scape and pedicel yellow; fourth antennal segment a little broader than long. *Thorax* black, brownish laterally, upper angle of mesepisterna beneath tegulæ and an-

terior lateral ridges of scutellum with small yellow areas; lower lateral region of pronotum shining and impunctate with about three longitudinal carinæ, uppermost longest, impunctate area continued above it; mesoscutum rather coarsely, irregularly punctured, notalices hardly evident; mesepisterna coarsely and closely punctured, punctures separated by much less than their diameters, dorsal process thin and inconspicuously differentiated from disc, sternauli as deep posteriorly as anteriorly; scutellum more coarsely and irregularly punctured than scutum, slightly depressed along longitudinal median line, lateral margins about parallel, posterior lateral angles robust and but slightly produced, basal depression with seven longitudinal carinæ; wings nearly clear except for a small, somewhat dusky area on costal margin of apex of wing, occupying apical half of marginal cell and adjacent portions of wings; areolet small and long petiolate, distocostal side longer than any other; stigma black; metapleura coarsely punctate, punctures separated by somewhat less than their diameters; fore legs dark brown, apices of femora and outer sides of tibiæ yellow, rest of tibiæ and tarsi testaceous; middle and hind legs dark brown, coxæ infuscated, middle trochanters partly yellow, and apices of middle femora and bases of middle tibiæ yellow; hind tibial spurs but little longer than apical width of hind tibiæ; first four hind tarsal segments slightly shorter than hind tibiæ; propodeum with costulæ distinct, areola broadest in anterior half, which is about parallel sided, giving off a strong carina on each side behind middle, these carinæ not dividing to enclose triangular spaces because of the reduction of their posterior rami; posterior lateral angles of propodeum elevated and angular, lateral carinæ of petiolar area weak. *Abdomen* black, almost without metallic reflection, tergites one to four with posterior lateral angles yellow, a brownish apical area uniting yellow areas on first tergite, fifth tergite with posterior margin, at the sides, narrowly yellow; abdomen coarsely punctate, second tergite more sparsely so than third, third and following tergites with punctures approximate and finer on posterior tergites; tergites two to six, especially four, with inconspicuous longitudinal median ridge; tergites all a little broader than long, fourth broadest (proportions of length to breadth of abdominal tergites: II, 15/19; III, 17/21; IV, 18/21; V, 16/21); first tergite, seen from side, angulate on upper surface, dorsal carinæ being strongly elevated to form angle, and subparallel for a short distance behind angle; longitudinal supra-spiracular carinæ distinct and complete; posterior lateral angles of second and third tergites weakly produced posteriorly; pubescence of posterior tergites fuscous.

Holotype, male: Wong Sa Shui, south Kiangsi, south China, July 9, 1936, collected by my friend, Mr. J. Linsley Gressitt, in

honor of whom this species is named. It is now on loan deposit in the California Academy of Sciences.

This species differs from *M. dissectorius* (Panzer) and *M. baibarensis* Uchida by the absence of a strong blue reflection on the abdomen, which is broadest at the fourth instead of the fifth segment. It differs from the former also by the more elongate facial shield, and from the latter, as well as from *M. fuscipennis* Wesmael in the absence of complete abdominal fasciæ, and from *fuscipennis* at least in the shape of the first abdominal tergite, which is broader than long, and in the closely punctured mesepisterna.

METOPIUS (CERATOPIUS) RUFUS BROWNI (Ashmead)

Metopius browni Ashmead, 1905, Proc. U. S. Nat. Mus., 29:117.

Metopius kakogawanus Matsumura, 1912, Thous. Ins. Japan, suppl., 4:100, pl. 47, f.18.

Metopius rufus Sonan, 1925, Taiwan Nojiho, 219, p. 13.

Metopius (Ceratopius) formosanus Clémont, 1929, Konowia, 8:410.

Metopius (Ceratopius) rufus Uchida, 1930, Jour. Fac. Agr. Hokkaido Imp. Univ., 25:248.

Metopius rufus f. *kakogawanus* Uchida, 1932, Jour. Fac. Agr. Hokkaido Imp. Univ., 33:208, 222.

Metopius rufus Cameron, with its subspecies *browni*, has an extensive distribution, from India to the Philippine Islands, and far north into China and Japan. Certain specimens included in the following list of localities are from regions outside of the distributional scope of this paper.

One female, Mei-hsien, east Kwantung, south China, July 19, 1936 (J. L. Gressitt); one female, Nanking, China, June 3, 1923 (E. C. Van Dyke); one female and two males, Tokyo, Japan, April 15, 1930, and June 2 and 3, 1931 (J. L. Gressitt). Previously reported from Hongkong.

The males here recorded from Tokyo agree well with Ashmead's description of *browni*, as well as with Uchida's notes on the male of *rufus*. The similarity of the descriptions of *browni* and *pulchripes* Cameron suggests that the male of the typical Indian *rufus* may be *pulchripes*.

Metopius (Ceratopius) uchidai Michener, new species

This is a strongly maculated, non-metallic form, with conspicuous yellow bands on the first four abdominal tergites, in

contrast to the almost entirely black apical portion of the abdomen.

Male: Length 13 mm. *Head* with face yellow, except for a small infuscated area on each side below facial shield, the yellow extending up on sides of face nearly to level of ocelli; labrum, large area on mandibles, palpi, and scape and pedicel except dorsal side yellow; cheeks feebly bulging behind eyes; facial shield longer than broad, widest above middle, upper margin convex because of a median angle, on each side of which the margin is nearly straight, lower margin separated from anterior margin of clypeus by distance equal to over two-thirds of basal width of mandible; facial shield rather finely punctate, punctures separated by a little more than their diameters except on the closely punctate median area; clypeus below shield fully as coarsely punctate as shield; frons very finely punctate, with fine transverse striæ; lateral ocelli separated from eye margin by a little more than ocellar diameter; antennæ black above, flagellum brown beneath, fourth segment of antennæ broader than long. *Thorax* black, with broad, elongate areas on posterior margin of pronotum adjacent to mesoscutum, anterior lateral areas and posterior half of scutellum, large median area of metanotum, longitudinal area beneath tegulæ and larger vertical area beneath it, and small spots on posterior lateral angles of propodeum bright yellow; lower lateral portions of pronotum shining and impunctate with four or five longitudinal carinæ, the upper ones reduced posteriorly, impunctate area not extending above uppermost carina; mesoscutum irregularly punctured; mesepisterna coarsely punctured, intervals between punctures less than their diameters, punctures of sternauli, which are shallower posteriorly than anteriorly, fine; dorsal mesepisternal process thickened and rounded; mesoscutellum closely punctured, more finely so than some parts of mesoscutum, lateral margins diverging posteriorly, lateral apical angles strongly produced into long points, basal depression with four longitudinal carinæ; wings brownish, with darker area occupying apical part of marginal cell and most of last (open) submarginal, areolet elongate, large, not or very briefly petiolate, distocostal margin but little longer than basocaudal margin, stigma light brown; metapleura coarsely and rather closely punctate; fore and middle legs yellow except for large brown areas on inner side of femora; hind coxæ black, trochanters yellow maculated with brown, femora black with yellow spot on either side at base and apex, tibiæ and tarsi dark brown, hind tibial spurs considerably longer than greatest width of tibia, first four hind tarsal segments about as long as hind tibiæ; propodeum with areola large, with longitudinal median carina, posterior end open; areola broadest in front of the middle, sides arcuate, giving off near middle, on each side, a carina which

soon disappears; regions laterad to areola with large, smooth, and polished area basally; posterior lateral angles of propodeum rounded. *Abdomen* black, not metallic, tergites one to four with broad apical yellow bands, those of tergites one to three broadest laterally, that of second tergite narrowest, middorsally occupying about one-fourth of the tergite, that of fourth broadest, occupying more than one-half of the tergite; posterior margins of tergites five, six, and seven very narrowly yellowish at sides; punctures of abdomen coarse, becoming finer posteriorly, close except on sixth and seventh tergites, where they are somewhat separated; tergites three and four with feeble longitudinal, middorsal ridge; first tergite longer than broad, upper surface rounded as seen in profile, dorsal carinae weakened posteriorly, subparallel in posterior median region, elsewhere converging toward the rear; supra-spiracular carinae absent; second tergite slightly broader than long, third to fifth about as broad as long, second and third produced slightly posteriorly at sides; sixth tergite somewhat broader than long, seventh broader than long (proportions of length to breadth of abdominal tergites: II, 17/20; III, 21/21; IV, 21/23; V, 20/21).

Holotype, male: Nodda, Hainan Island, China, June 19, 1935 (J. L. Gressitt), on loan deposit in the California Academy of Sciences.

A female, no doubt of the same species, is from Yim Na San, east Kwantung, south China, June 13, 1936 (J. L. Gressitt). It differs from the male, in addition to the usual sexual characteristics, thus:

Clypeus below facial shield, labrum, and mandibles dark reddish brown, the clypeus infuscated; dorsal posterior mark on pronotum reddish; fore and middle legs with femora except apices, inner sides of tibiae, and parts of tarsi light reddish brown; hind legs with femora reddish brown, outer sides with black median area, yellow apical area, and minute yellow basal area; wings with apical dusky spot more conspicuous; abdominal tergites five and six with very narrow posterior margins reddish brown, tergite seven mostly reddish brown.

This species is possibly related to *M. kakiensis* Matsumura, from which it differs in the broad apical yellow band on the scutellum, the complete yellow bands on the first three abdominal tergites, and the apically dusky wings.

I take pleasure in naming this striking species for Dr. Toichi Uchida, in recognition of his extensive work on Oriental Ichneumonidae.